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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/227,398	01/08/1999	KENT K. LEUNG	CISCP077	8362

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EXAMINER
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MEHRPOUR, NAGHMEH

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/27,398

Applicant(s)

ELSHOURBAGY ET AL

Examiner

Naghmeh Mehrpour

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7, 12-14, 18, 20, 22, 32, 36-45 and 47-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7, 12-14, 18, 20-22, 32, 36-45, 47-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-4, 7, 12-14, 18, 22-26, 32, 37-38, 41-45, 47-55**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al (US Publication Number 2002/0186688 A1) in view of Grob et al. (US Patent 6,894,994 B1).

Regarding **Claims 1, 3, 13, 23, 37, 43**, Inoue teaches a network device which supports mobile IP is configured to send an authorization request, the authorizing request identifying a mobile node, the network device comprising:

a memory (page 2 section 20);

a processor coupled to the memory, wherein the network device and plurality of mobile nodes each of the plurality of network devices a Home Agent or a Foreign Agent adapted for sending a request to the server being a Home Agent or a Foreign Agent adapted for sending request to the server associated with a mobile node supported by a plurality of Home Agents (page 2 section 20), and each of the plurality of network devices a Home Agent or a Foreign Agent sending information, the network device adapted for sending the to a server in response to a trigger event identifying the mobile

node initiation or termination of a registration of the mobile node, the trigger event including the counter associated with the mobile's node's activity during Mobile IP a session, the trigger being a lapse of a predetermined period of time and wherein the server is not a Home agent or a foreign agent (page 6 sections 0111-0112, page 7 section 0114). Inoue fails to teach wherein the server configured to maintain accounting information for a plurality of mobile supported by a plurality of network devices, the accounting information being received from the plurality of network devices, each of plurality of network devices being a Home Agent or a foreign agent supporting mobile IP wherein the server is not a Home agent or a foreign agent, **wherein the accounting request indicates both identifying a request to update accounting information associated with the mobile node using the counter.** However, Grob the server configured to maintain accounting information for a plurality of mobile supported by a plurality of network devices, the accounting information being received from the plurality of network devices, each of plurality of network devices being a Home Agent (access point) or a foreign agent supporting mobile IP wherein the server is not a Home agent or a foreign agent users only pay for the cost of connecting to corporate remote access, the server to update accounting information associated with a mobile node **wherein the accounting request indicates both identifying a request to update accounting information associated with the mobile node** (col 5 lines 52-67, col 6 lines 1-17, col 19 lines 1-21). Inoue using timer counter in the home agent, initialize the counter, the mobile user registers upon receiving the current location, and when receiving different location she re-registers, then the timer counter gets updated. Therefore, it would have

been obvious to the ordinary skill in the art at the time the invention was made to combine the above teaching of Grob with Inoue, in order to provides call related processing for one or more MPTs.

Regarding **Claims 2, 25, 29**, Inoue teaches a network device received and send packets by the mobile node, and each of the plurality of network devices a Home agent sending information to the server to update, a counter that counts a total service time for the mobile node (page 6 sections 0110, 0111).

Regarding **Claims 4, 14, 28, 38**, Inoue fails to teach server that is adapted for sending an accounting reply to the network device in response to the accounting request, and accounting reply acknowledging logging of the accounting information pertaining to the mobile node. However, Grob teaches teach server that is adapted for sending an accounting reply to the network device in response to the accounting request, and accounting reply acknowledging logging of the accounting information pertaining to the mobile node (col 5 lines 54-67, col 6 lines 1-25). Therefore, it would have been obvious to the ordinary skill in the art at the time the invention was made to combine the above teaching of Grob with Inoue, in order to provides call related processing for one or more MPTs.

Regarding **Claims 7, 18, 32, 41, 45**, Inoue teaches a server wherein the counter indicates a number of registrations that have been accepted (page 6 section 0111-0112, page 10 section 0156).

Regarding **Claims 12, 22, 48, 52**, Inoue fails to teach a server wherein the server is a RADIUS server. However, Grob teaches a server wherein the server is a RADIUS serve (col 6 lines 3-18). Therefore, it would have been obvious to the ordinary skill in the art at the time the invention was made to combine the above teaching of Grob with Inoue, in order to provides call related processing for one or more MPTs.

Regarding **Claims 24, 26**, Inoue teaches a method further including forwarding the data packet to another network device (page 4 sections 0048-0049).

Regarding **Claims 42, 44**, Inoue using timer counter in the home agent, initialize the counter, the mobile user registers upon receiving the current location, and when receiving different location she re-registers, then the timer counter gets update Inoue Inoue fails to teach a Network device wherein the accounting request further includes a value associated with the counter. However, Grob teaches a Network device wherein the accounting request further includes a value (page 6 section 0114). Therefore, it would have been obvious to the ordinary skill in the art at the time the invention was made to combine the above teaching of Grob with Inoue, in order to provides call related processing for one or more MPTs.

Regarding **Claims 49-51**, Inoue fails to teach a network wherein the server is a AAA server and accounting request is sent in accordance with a AAA server protocol.

However Grob teaches a network wherein the server is a AAA server and accounting request is sent in accordance with a AAA server protocol (col 23 lines 30-60).

Regarding **Claims 53-55**, Inoue modified by Grob fails to teach the network device wherein the server does not support Mobile IP. However the Examiner takes official notice a network wherein does not support Mobile IP node, is well known in the art. Therefore, it would have been obvious to the ordinary skill in the art at the time the invention was made to combine the above teaching of with Inoue modified by Grob, in order to enable the corporate users accessing network from home or while on the road, while the end users only pay for the cost of connecting to corporate remote access.

3. **Claims 27-28, 36, 39-40, 56**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Short et al. (US Patent 6, 636,894 B1) in view of Inoue et al (US Publication 2002/0186688 A1).

Regarding **Claims 27, 39**, Short teaches computer-readable medium that does not support IP, the AAA server configured to maintain accounting information for a plurality of computer supported by a plurality of network devices, the accounting information being received from the plurality of network devices (col 9 lines 5-25), a method of

updating accounting information for a computer node operating according to IP protocol (col 7 lines 9-24, col 11 lines 53-56) comprising:

receiving a request packet from a network device operating under computer IP Protocol, the request packet being sent in accordance with a AAA server protocol (col 5 lines 15-30), the request packet identifying the mobile node and including at least one counter associated with accounting information pertaining to computer node **wherein the accounting request indicates both identifying a request to update accounting information associated with the computer node using the counter** (col 11 lines 51-64), a total service time for the mobile node, indicating at least one of a number of packets that have been sent from the mobile node, a total time for the computer node (col 10 lines 20-40), number of bytes that have been sent to the computer node and a number of bytes that been sent from the computer node (col 10 lines 20-40); and

instructions logging the accounting information for the computer node identified in the request packet using the at least one counter of the request packet (col 8 lines 43-62, col 11 lines 44-60).

Short fails to teach that the network device being a Home Agent or foreign Agent supporting the mobile node. However Inoue teaches a communication system wherein Mobile IP standard are commonly referred to as a foreign agent (FA) (page 4 sections 0047-0048). Therefore, it would have been obvious to the ordinary skill in the art at the time the invention was made to combine the above teaching of Inoue with Short, in order to provide low cost deployment, ease of maintenance and ability to degrade gracefully under heavy load condition.



Regarding **Claims 28, 40**, Short teaches a that is adapted for sending an accounting reply to the network device in response to the accounting request (col 8 lines 31-42, col 11 lines 43-65), and accounting reply acknowledging logging of the accounting information pertaining to the computer node (col 10 lines 20-40).

Regarding **Claim 56**, Short teaches a method wherein the server is not a Home Agent or a Foreign Agent (col 5 lines 15-30).

4. **Claim 29**, is rejected under 35 U.S.C. 103(a) as being unpatentable over Short et al. (US Patent 6, 636,894 B1) in view of Inoue et al (US Publication 2002/0186688 A1) in further view of Grob et al. (US Patent 6,894,994 B1).

Regarding **Claim 29**, Short teaches a method of generating bill for computer node from the accounting information (col 10 lines 20-40). Short modified by Inoue fails to teach a method further comprising: generating a bill for Mobile IP service from the accounting information. However, Grob teaches to teach a method further comprising: generating a bill for Mobile IP service from the accounting information (col 6 lines 3-67). Therefore, it would have been obvious to the ordinary skill in the art at the time the invention was made to combine the above teaching of Grob with Short modified by Inoue, in order to provides call related processing for one or more MPTs.

### **Response to Arguments**

5. Applicant's arguments filed 9/20/05 have been fully considered but they are not persuasive.

In response to the applicant's argument that "*Inoue fails to teach a method/mobile wherein the accounting request indicates both identifying a request to update accounting information associated with the mobile node using the counter*", examiner maintain the rejection, Inoue using timer counter in the home agent, initialize the counter, the mobile user registers upon receiving the current location, and when receiving different location she re-registers, then the timer counter gets updated because Inou does not teach the above limitation, Grob teaches a method/mobile wherein the accounting request indicates both identifying a request to update accounting information associated with the mobile node" (see col 5 lines 57-67, col 6 lines 1-26). In addition the examiner asserts that, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to the applicant's argument that "*Grob fails to teach a Radius server is capable of receiving accounting information*

*from a plurality of network devices, where each of the network devices is a Home agent or Foreign Agent*", the examiner asserts that col 6 lines 3-25, of Grob specifically mentions that a Radius server is capable of receiving accounting information from a plurality of network devices, where each of the network devices is a Home agent or Foreign Agent (access points). Grob teaches A RADIUS server 142A performs Accounting (AAA) functions. The PDSN communicates with RADIUS server 142A to authenticate and authorize an access terminal 110 and to receive accounting information. RADIUS server 142A also stores profile information and accounting information for users on the HDR system. Records are sent from the **access points** (Home agent/foreign agent) to RADIUS server 142A periodically (UPDATING) (col 6 lines 3-25).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case Grob teaches an RADIUS server performs Accounting (AAA) functions. The PDSN communicates with RADIUS server through an access terminal to receive accounting information. RADIUS server also stores profile information and accounting information for users on the HDR system. Records are sent from the access points (home agent or foreign agent) to

RADIUS server periodically (UPDATING) (col 6 lines 3-25). In addition see rejection for claim 1.

In response to applicant's argument that "*Short is not a system operating under the mobile IP protocol*", the examiner asserts that since Grob modified by Inoue disclose a system that operating under Mobile IP protocol, Short does not need to teaches a system that operates under Mobile IP Protocol

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. **Any responses to this action should be mailed to:**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naghmeh Mehrpour whose telephone number is 571-272-7913. The examiner can normally be reached on 8:00- 6:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold be reached (571) 272-7905.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NM

February 9, 2006

  
CHARLES APPIAH  
PRIMARY EXAMINER